APPROVED JURISDICTIONAL DETERMINATION FORM
U.S. Army Corps of Engineers

SECTION I: BACKGROUND INFORMATION

A. REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): 25-Aug-2008

B. DISTRICT OFFICE, FILE NAME, AND NUMBER: Nashville District, LRN-2007-01987-JD1

C. PROJECT LOCATION AND BACKGROUND INFORMATION:

State :	AL - Alabama
County/parish/borough:	Madison
City:	Huntsville
Lat:	
Long:	
Universal Transverse Mercator:	[ ]
Name of nearest waterbody:	Unnamed Tributary of Knox Creek
Name of nearest Traditional Navigable Water (TNW):	Limestone Creek
Name of watershed or Hydrologic Unit Code (HUC):	6030002

☑ Check if map/diagram of review area and/or potential jurisdictional areas is/are available upon request.

☐ Check if other sites (e.g., offsite mitigation sites, disposal sites, etc¿) are associated with the action and are recorded on a different JD form.

D. REVIEW PERFORMED FOR SITE EVALUATION:

☑ Office Determination Date: 25-Aug-2008

☑ Field Determination Date (s): ☐ 30-Jul-2008 ☐ 12-Aug-2008

SECTION II: SUMMARY OF FINDINGS

A. RHA SECTION 10 DETERMINATION OF JURISDICTION

There [ ] "navigable waters of the U.S." within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the review area.

☐ Waters subject to the ebb and flow of the tide.

☐ Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce.

Explain:

B. CWA SECTION 404 DETERMINATION OF JURISDICTION.

There [ ] "waters of the U.S." within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area.

1. Waters of the U.S.

a. Indicate presence of waters of U.S. in review area:[1]

Water Name	Water Type(s) Present
UT Knox Creek	Relatively Permanent Waters (RPWs) that flow directly or indirectly into TNWs
Wetland Abutting UT Knox Creek	Wetlands directly abutting RPWs that flow directly or indirectly into TNWs

b. Identify (estimate) size of waters of the U.S. in the review area:

Area: (m^2)

Linear: (m)

c. Limits (boundaries) of jurisdiction:

based on: [ ]

OHWM Elevation: (if known)

2. Non-regulated waters/wetlands:[3]

Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain:

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

1.TNW

Not Applicable.

2. Wetland Adjacent to TNW
Not Applicable.

B. CHARACTERISTICS OF TRIBUTARY (THAT IS NOT A TNW) AND ITS ADJACENT WETLANDS (IF ANY):

1. Characteristics of non-TNWs that flow directly or indirectly into TNW

(i) General Area Conditions:

Watershed size: [ ]
Drainage area: [ ]
Average annual rainfall: inches
Average annual snowfall: inches

(ii) Physical Characteristics
(a) Relationship with TNW:

☐ Tributary flows directly into TNW.
☐ Tributary flows through [ ] tributaries before entering TNW.
:Number of tributaries

Project waters are [ ] river miles from TNW.
Project waters are [ ] river miles from RPW.
Project Waters are [ ] aerial (straight) miles from TNW.
Project waters are [ ] aerial(straight) miles from RPW.

☐
Project waters cross or serve as state boundaries.
Explain:
Identify flow route to TNW:[5]

Tributary Stream Order, if known:

Order	Tributary Name
1	UT Knox Creek

(b) General Tributary Characteristics:
Tributary is:

Tributary Name	Natural	Artificial	Explain	Manipulated	Explain
UT Knox Creek	-	-	-	X	upstream end comes from culvert that has caused large scour pool instream. Downstream end was historically impounded by earthen dam, since breached.

Tributary properties with respect to top of bank (estimate):

Tributary Name	Width (ft)	Depth (ft)	Side Slopes
UT Knox Creek	4	2	2:1

Primary tributary substrate composition:

Tributary Name	Silt	Sands	Concrete	Cobble	Gravel	Muck	Bedrock	Vegetation	Other
UT Knox Creek	X	-	-	-	-	-	-	-	-

Tributary (conditions, stability, presence, geometry, gradient):

Tributary Name	Condition\Stability	Run\Riffle\Pool Complexes	Geometry	Gradient (%)
UT Knox Creek	stable	no	Meandering	.53

(c) Flow:

Tributary Name	Provides for	Events Per Year	Flow Regime	Duration & Volume
UT Knox Creek	Perennial flow	20 (or greater)	year round	-

Surface Flow is:

Tributary Name	Surface Flow	Characteristics
UT Knox Creek	Confined	-

Subsurface Flow:

Tributary Name	Subsurface Flow	Explain Findings	Dye (or other) Test
UT Knox Creek	Unknown	-	-

Tributary has:

Tributary Name	Bed & Banks	OHWM	Discontinuous OHWM[7]	Explain
UT Knox Creek	X	X	-	-

Tributaries with OHWM[6] - (as indicated above)

Tributary Name	OHWM	Clear	Litter	Changes in Soil	Destruction Vegetation	Shelving	Wrack Line	Matted\Absent Vegetation	Sediment Sorting	Leaf Litter	Scour	Sediment Deposition	Flow Events	Water Staining	Changes Plant	Other
UT Knox Creek	X	X	-	-	X	-	-	X	-	X	X	-	X	-	-	-

If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction:

High Tide Line indicated by:
Not Applicable.

Mean High Water Mark indicated by:
Not Applicable.

(iii) Chemical Characteristics:
Characterize tributary (e.g., water color is clear, discolored, oily film; water quality;general watershed characteristics, etc.).

Tributary Name	Explain	Identify specific pollutants, if known
UT Knox Creek	water clear, watershed mostly urban and continuing to develop.	-

(iv) Biological Characteristics. Channel supports:

Tributary Name	Riparian Corridor	Characteristics	Wetland Fringe	Characteristics	Habitat
UT Knox Creek	X	narrow wooded	X	wooded and scrub/shrub	X

Habitat for: (as indicated above)

Tributary Name	Habitat	Federally Listed Species	Explain Findings	Fish\Spawn Areas	Explain Findings	Other Environmentally Sensitive Species	Explain Findings	Aquatic\Wildlife Diversity	Explain Findings
UT Knox Creek	X	-	-	-	-	-	-	X	fish and aquatic macroinvertebrates, crayfish

2. Characteristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW

(i) Physical Characteristics:
(a) General Wetland Characteristics:
Properties:

Wetland Name	Size (Acres)	Wetland Type	Wetland Quality	Cross or Serve as State Boundaries. Explain
Wetland Abutting UT Knox Creek	1	palustrine forested	good	-

(b) General Flow Relationship with Non-TNW:
Flow is:

Wetland Name	Flow	Explain
Wetland Abutting UT Knox Creek	Perennial flow.	-

Surface flow is:

Wetland Name	Flow	Characteristics
Wetland Abutting UT Knox Creek	Discrete and confined	-

Subsurface flow:

Wetland Name	Subsurface Flow	Explain Findings	Dye (or other) Test
Wetland Abutting UT Knox Creek	Unknown	-	-

(c) Wetland Adjacency Determination with Non-TNW:

Wetland Name	Directly Abutting	Discrete Wetland Hydrologic Connection	Ecological Connection	Separated by Berm/Barrier
Wetland Abutting UT Knox Creek	Yes	-	-	-

(d) Proximity (Relationship) to TNW:

Wetland Name	River Miles From TNW	Aerial Miles From TNW	Flow Direction	Within Floodplain
Wetland Abutting UT Knox Creek	2-5	2-5	Wetland to navigable waters	-

(ii) Chemical Characteristics:
Characterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.).

Wetland Name	Explain	Identify specific pollutants, if known
Wetland Abutting UT Knox Creek	-	-

(iii) Biological Characteristics. Wetland supports:

Wetland Name	Riparian Buffer	Characteristics	Vegetation	Explain
Wetland Abutting UT Knox Creek	X	narrow woods	X	50% trees, 50% scrub/shrub

Habitat for:

Wetland Name	Habitat	Federally Listed Species	Explain Findings	Spawn Area	Explain Findings	Other Environmentally Sensitive Species	Explain Findings	Aquatic\Wildlife Diversity	Explain Findings
Wetland Abutting UT Knox Creek	X	-	-	-	-	-	-	X	amphibians, reptiles and crayfish

3. Characteristics of all wetlands adjacent to the tributary (if any):
All wetlands being considered in the cumulative analysis:
Not Applicable.

Summarize overall biological, chemical and physical functions being performed:
Not Applicable.

C. SIGNIFICANT NEXUS DETERMINATION

A significant nexus analysis will assess the flow characteristics and functions of the tributary itself and the functions performed by any wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical, and biological integrity of a TNW. For each of the following situations, a significant nexus exists if the tributary, in combination with all of its adjacent wetlands, has more than a speculative or insubstantial effect on the chemical, physical and/or biological integrity of a TNW. Considerations when evaluating significant nexus include, but are not limited to the volume, duration, and frequency of the flow of water in the tributary and its proximity to a TNW, and the functions performed by the tributary and all its adjacent wetlands. It is not appropriate to determine significant nexus based solely on any specific threshold of distance (e.g. between a tributary and its adjacent wetland or between a tributary and the TNW). Similarly, the fact an adjacent wetland lies within or outside of a floodplain is not solely determinative of significant nexus.

Significant Nexus: Not Applicable

D. DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/ WETLANDS ARE:

1. TNWs and Adjacent Wetlands:
Not Applicable.

2. RPWs that flow directly or indirectly into TNWs:

Wetland Name	Flow	Explain
UT Knox Creek	PERENNIAL	flowing during site visit while drought exists in area in July

Provide estimates for jurisdictional waters in the review area:

Wetland Name	Type	Size (Linear) (m)	Size (Area) (m²)
UT Knox Creek	Relatively Permanent Waters (RPWs) that flow directly or indirectly into TNWs	274.32	-
Total:		**274.32**	**0**

3. Non-RPWs that flow directly or indirectly into TNWs:[8]
Not Applicable.

Provide estimates for jurisdictional waters in the review area:
Not Applicable.

4. Wetlands directly abutting an RPW that flow directly or indirectly into TNWs.

Wetland Name	Flow	Explain
Wetland Abutting UT Knox Creek	PERENNIAL	perennial stream flows through

Provide acreage estimates for jurisdictional wetlands in the review area:

Wetland Name	Type	Size (Linear) (m)	Size (Area) (m²)
Wetland Abutting UT Knox Creek	Wetlands directly abutting RPWs that flow directly or indirectly into TNWs	-	4046.856
Total:		**0**	**4046.856**

5. Wetlands adjacent to but not directly abutting an RPW that flow directly or indirectly into TNWs:
Not Applicable.

Provide acreage estimates for jurisdictional wetlands in the review area:
Not Applicable.

6. Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs:
Not Applicable.

Provide estimates for jurisdictional wetlands in the review area:
Not Applicable.

7. Impoundments of jurisdictional waters:[9]
Not Applicable.

E. ISOLATED [INTERSTATE OR INTRA-STATE] WATERS INCLUDING ISOLATED WETLANDS, THE USE, DEGRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE, INCLUDING ANY SUCH WATERS:[10]
Not Applicable.

Identify water body and summarize rationale supporting determination:
Not Applicable.

Provide estimates for jurisdictional waters in the review area:
Not Applicable.

F. NON-JURISDICTIONAL WATERS. INCLUDING WETLANDS

☐
If potential wetlands were assessed within the review area, these areas did not meet the criteria in the 1987 Corps of Engineers Wetland Delineation Manual and/or appropriate Regional Supplements:

☐
Review area included isolated waters with no substantial nexus to interstate (or foreign) commerce:

☐
Prior to the Jan 2001 Supreme Court decision in "SWANCC," the review area would have been regulated based soley on the "Migratory Bird Rule" (MBR):

☐
Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction (Explain):

☐
Other (Explain):

Provide acreage estimates for non-jurisdictional waters in the review area, where the sole potential basis of jurisdiction is the MBR factors (ie., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional judgment:
Not Applicable.

Provide acreage estimates for non-jurisdictional waters in the review area, that do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction.
Not Applicable.

SECTION IV: DATA SOURCES.

A. SUPPORTING DATA. Data reviewed for JD
(listed items shall be included in case file and, where checked and requested, appropriately reference below):

Data Reviewed	Source Label	Source Description
--Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant	-	-
--Data sheets prepared/submitted by or on behalf of the applicant/consultant	-	-
----Office concurs with data sheets/delineation report	-	-
--Corps navigable waters study	-	Nashville District Public Notice #86-23, dated 8 May 1986
--U.S. Geological Survey map(s).	-	1:24,000, Jeff, AL
--USDA Natural Resources Conservation Service Soil Survey.	-	Madison County, AL
--Photographs	-	-
----Other	-	site visit photos

B. ADDITIONAL COMMENTS TO SUPPORT JD:
Not Applicable.

---

[1]-Boxes checked below shall be supported by completing the appropriate sections in Section III below.
[2]-For purposes of this form, an RPW is defined as a tributary that is not a TNW and that typically flows year-round or has continuous flow at least "seasonally" (e.g., typically 3 months).
[3]-Supporting documentation is presented in Section III.F.
[4]-Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West.
[5]-Flow route can be described by identifying, e.g., tributary a, which flows through the review area, to flow into tributary b, which then flows into TNW.
[6]-A natural or man-made discontinuity in the OHWM does not necessarily sever jurisdiction (e.g., where the stream temporarily flows underground, or where the OHWM has been removed by development or agricultural practices). Where there is a break in the OHWM that is unrelated to the waterbody's flow regime (e.g., flow over a rock outcrop or through a culvert), the agencies will look for indicators of flow above and below the break.
[7]-Ibid.
[8]-See Footnote #3.
[9] -To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.
[10]-Prior to asserting or declining CWA jurisdiction based solely on this category, Corps Districts will elevate the action to Corps and EPA HQ for review consistent with the process described in the Corps/EPA Memorandum Regarding CWA Act Jurisdiction Following Rapanos.